Applicants: Maximilian Pitschi, et al. Attorney Docket No: 14219-109US1

Serial No.: 10/559,508

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AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the

Client Ref.: P2004,0316USN

application:

<u>LISTING OF CLAIMS</u>:

1. (Currently Amended) SAW A surface acoustic wave filter[[,]] comprising:

constructed on the surface of a piezoelectric substrate;

containing two electrically interconnected acoustic tracks on the piezoelectric substrate, the

acoustic tracks being adjacent and electrically interconnected positioned neighboring each other, in

which the acoustic tracks comprising electro-acoustic transducers, the electro-acoustic transducers

comprising an (W1, W2) acting as input transducer and an output transducer; and respectively are

positioned,

where a metallic shielding structure (AS) that is metallic and that is connected to ground, the

shielding structure being is positioned between the two acoustic tracks, which shields the shielding

structure shielding a first electro-acoustic transducer in a first acoustic track from a second electro-

acoustic transducer in a second acoustic track at least two transducers positioned in different tracks

against each other.

2 (Currently Amended) SAW filter in accordance with The surface acoustic wave filter of

claim 1, where wherein the two first and second electro-acoustic transducers (W1, W2) shielded

against each other each have one a bus bar facing the shielding structure (AS), and where wherein at

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least one of these bus bars bar facing the shielding structure is electrically floating or connected to a voltage that is different from other than ground.

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3. (Currently Amended) -SAW filter in accordance with A DMS filter comprising the surface acoustic wave filter of claim 1 or 2, [[- designed as DMS filter]], wherein the first electro-acoustic transducer comprises the input transducer and the second electro-acoustic transducer comprises the output transducer, the DMS filter further comprising:

[[-]] with a first transducer serving as input transducer (W1) and a first coupling transducer (K1) in the first acoustic track, the first coupling transducer comprising a first bus bar,

[[-]] with a second coupling transducer (K2) and second transducer serving as output transducer (W2) in the second acoustic track, the second coupling transducer comprising a second bus bar; and

[[-]] with a coupling line that electrically connects the first and second bus bars; electrically connecting one bus bar of the first and second coupling transducers, respectively

[[- where]] wherein the shielding structure (AS) is positioned between the first electroacoustic transducer and the second electro-acoustic transducer.

4 (Currently Amended) SAW filter in accordance with The DMS filter of claim 3, wherein the first bus bar comprises a bus bar of the first coupling transducer that is furthest from the second acoustic track, and the second bus bar comprise a bus bar of the second coupling transducer that is furthest from the first acoustic track where the coupling line (KL) in each track is connected to that bus Applicants: Maximilian Pitschi, et al. Attorney Docket No: 14219-109US1 Client Ref.: P2004,0316USN

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bar of the corresponding coupling transducer (K1, K2), respectively, which is farther away from the other track.

5 (Currently Amended) SAW filter in accordance with The DMS filter of claim 4, further comprising:

where the acoustic tracks are bordered by two reflectors that sandwich the acoustic tracks; (R, R'), respectively,

where wherein the coupling line (KL) is routed extends around the reflectors outside the acoustic tracks.

6 (Currently Amended) SAW filter in accordance with one of the claims 3 to 5, The DMS filter of claim 3, wherein where the shielding structure (AS) is connected to an external ground and to the a bus bar of one of the coupling transducers (K1, K2) respectively, which a coupling transducer that is not connected to the coupling line (KL).

7. (Currently Amended) SAW filter in accordance with one of the claims 1 to 6. The surface acoustic wave filter of claim 1, further comprising; where the acoustic tracks are bordered by two reflectors that border the acoustic tracks; (R) respectively,

where wherein the shielding structure (AS) is connected to an external ground and to the reflectors.

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8 (Currently Amended) SAW filter in accordance with one of the claims 3 to 7, The DMS filter of claim 3, wherein the first electro-acoustic transducer comprises a first outer bus bar and the second electro-acoustic transducer comprises a second outer bus bar, the first outer bus bar comprising a bus bar of the first electro-acoustic transducer that is furthest from the second acoustic track, and the second outer bus bar comprising a bus bar of the second electro-acoustic transducer that is furthest from the first acoustic track, the first outer bus bar comprising first and second sub-bars, the second outer bus bar comprising third and fourth sub-bars, the first and second sub-bars being connected to first and second input terminals, respectively, and the third and fourth sub-bars being connected to first and second output terminals, respectively; where in the first and the second transducer (W1, W2) the bus bar that is further away from the neighboring track in each case is divided into two sub-bars, which means that each sub-bar of the first transducer (W1) is connected to one of the external terminals of the input (IN) and each sub-bar of the second transducer (W2) is connected to one of the external terminals of the output (OUT), and

where wherein the first electro-acoustic transducer and the second electro-acoustic transducer operate symmetrically and second transducers (W1, W2) serving as input transducer and output transducer are assigned to a corresponding symmetrical input or output (IN, OUT).

9. (Currently Amended) SAW filter in accordance with one of the claims 1 to 8, The surface acoustic wave filter of claim 1, wherein where the transducers (W1, W2) first electro-acoustic transducer, the second electro-acoustic transducer, and the shielding structure (AS) are made up of the a same metal plating.

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10. (Currently Amended) SAW filter in accordance with one of the claims 1 to The surface acoustic wave filter of claim 9, where wherein the metal plating of the transducers (W1, W2) and the

shielding structure (AS) have comprises a layer of aluminum or an alloy containing aluminum, or a

multiple-layer composition which that contains at least one layer of aluminum or of an

aluminum alloy.

11. (Currently Amended) SAW filter in accordance with one of the claims 1 to 10, where

The surface acoustic wave filter of claim 1, further comprising:

a carrier on which the piezoelectric substrate is mounted on a carrier in a flip-chip

arrangement[[,]]; and

where an electricity an electrically-conducting connection is performed between a connecting

surface positioned on the carrier and the shielding structure, the electrically-conducting connection

comprising (AS) with one or more bumps.

12. (Currently Amended) SAW filter in accordance with one of the claims 1 to 11, where

The surface acoustic wave filter of claim 1, wherein the shielding structure (AS) extends is at least

along the an entire length of the two first and second electro-acoustic transducers (W1, W2) to be

shielded against each other.

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13. (Currently Amended) SAW filter in accordance with one of the claims 1 to 12, where

The surface acoustic wave filter of claim 1, wherein the shielding structure (AS) has a width which

that is noticeably larger than the facing bus bars of the first and second electro-acoustic transducers

transducer (W1, W2) that face each other.